Appendix D Noise Monitoring and Modeling

Long-Term 24 Hour Continuous Noise Monitoring
Model Input Sheet

Project: 60550073 - Loomis Costco EIR

Date: Existi **Tuesday, November 07, 2017** **Wednesday, November 08, 2017**

Site: Project Site, Northeastern Boundary

Hour	Leq	Lmax	L50	L90
15:00	51.2	73.7	47.9	43.2
16:00	51.2	66.2	49.4	44.3
17:00	54.6	66.7	53.9	51.9
18:00	54.9	63.7	54.5	52.3
19:00	54.1	62.5	53.4	51.3
20:00	54.1	66.9	53.4	51.4
21:00	53.0	73.3	52.2	50.3
22:00	51.4	64.3	50.9	48.7
23:00	50.3	59.4	49.4	47.1
0:00	48.6	64.0	47.5	44.7
1:00	48.3	66.0	46.8	43.5
2:00	46.6	55.1	46.2	43.2
3:00	48.6	58.5	47.7	45.1
4:00	50.9	67.0	50.2	47.9
5:00	51.7	62.7	51.3	49.5
6:00	54.4	67.1	53.7	51.5
7:00	54.1	66.5	53.5	51.4
8:00	52.0	64.3	50.6	48.5
9:00	49.9	64.8	47.9	44.9
10:00	49.6	68.0	46.6	42.8
11:00	55.0	65.0	54.5	51.9
12:00	55.2	64.4	54.6	50.3
13:00	54.9	67.3	54.3	51.0
14:00	58.3	82.1	55.8	53.5

Averages

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	54.1	67.7	52.2	49.3
Nighttime (10 p.m. - 7 a.m.)	50.7	62.7	49.3	46.8

Uppermost-Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	58.3	82.1	55.8	53.5
Nighttime (10 p.m. - 7 a.m.)	54.4	67.1	53.7	51.5

Percentage of Energy

Daytime	78%
Nighttime	22%

Calculated L_{dn}, dBA

57.8

Long-Term 24 Hour Continuous Noise Monitoring
Model Input Sheet

Project: 60550073 - Loomis Costco EIR

Date: Existi **Tuesday, November 07, 2017** **Wednesday, November 08, 2017**

Site: Project Site, Northeastern Boundary

Hour	Leq	Lmax	L50	L90
16:00	53.2	62.4	52.3	49.4
17:00	59.1	67.5	58.8	56.8
18:00	58.4	65.5	58.1	55.9
19:00	56.9	65.2	56.6	55.0
20:00	57.3	78.0	56.3	54.3
21:00	56.9	66.1	56.2	53.7
22:00	57.1	66.2	56.1	52.3
23:00	55.8	69.7	54.5	50.0
0:00	49.8	58.5	48.1	43.8
1:00	52.8	75.2	49.8	44.4
2:00	48.9	58.4	47.8	43.1
3:00	52.7	60.8	51.5	46.9
4:00	55.6	74.3	54.5	50.6
5:00	55.5	63.1	55.2	51.9
6:00	57.8	66.9	57.2	55.3
7:00	55.9	60.8	55.6	52.6
8:00	53.2	60.3	53.1	51.4
9:00	51.8	64.5	51.3	49.2
10:00	51.0	61.3	50.3	48.2
11:00	56.4	60.9	56.0	54.1
12:00	56.7	63.5	56.0	53.0
13:00	56.5	70.8	55.9	52.9
14:00	57.5	62.9	57.3	55.7
15:00	58.4	65.0	58.1	56.2

Averages

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	56.5	65.0	55.5	53.2
Nighttime (10 p.m. - 7 a.m.)	54.9	65.9	52.7	48.7

Uppermost-Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	59.1	78.0	58.8	56.8
Nighttime (10 p.m. - 7 a.m.)	57.8	75.2	57.2	55.3

Percentage of Energy

Daytime	71%
Nighttime	29%

Calculated L_{dn}, dBA

61.6

Project-Generated Construction Source Noise Prediction Model

Loomis Costco EIR

Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)
Threshold*	646	60
	50	88
LT-01-Ldn	125	78
ST_001	100	80
ST_003	100	80
ST_004	100	80
ST_005	100	80

Assumptions:	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Excavator	85	0.4
Dump Truck	84	0.4
Dozer	85	0.4
Grader	85	0.4
Pickup Truck	55	0.4
Backhoe	80	0.4
Generator	82	0.5

Ground Type	Soft
Ground Factor	0.50

Predicted Noise Level [2]	L_{eq} dBA at 50 feet[2]
Excavator	81.0
Dump Truck	80.0
Dozer	81.0
Grader	81.0
Pickup Truck	51.0
Backhoe	76.0
Generator	79.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
87.8

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, J

[2] Based on the following from the Federal Transit Noise and Vibrat

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

Loomis Costco EIR

Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)
Threshold*	585	60
	50	87
LT-01-Ldn	125	77
ST_001	100	79
ST_003	100	79
ST_004	100	79
ST_005	100	79

Assumptions:	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Excavator	85	0.4
Dozer	85	0.4
Flat Bed Truck	84	0.4
Crane	85	0.16
Man Lift	85	0.2

Ground Type	Soft
Ground Factor	0.50

Predicted Noise Level [2]	L_{eq} dBA at 50 feet[2]
Excavator	81.0
Dozer	81.0
Flat Bed Truck	80.0
Crane	77.0
Man Lift	78.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
86.7

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, J

[2] Based on the following from the Federal Transit Noise and Vibrat

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

Loomis Costco EIR

Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)
Threshold*	1,112	60
	50	87
LT-01-Ldn	125	79
ST_001	100	81
ST_003	100	81
ST_004	100	81
ST_005	100	81

Assumptions:	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Paver	85	0.5
Concrete Mixer Truck	85	0.4
Man Lift	85	0.2
Compactor (ground)	80	0.2
Concrete Mixer Truck	85	0.4

Ground Type	hard
Ground Factor	0.00

Predicted Noise Level [2]	L_{eq} dBA at 50 feet[2]
Paver	82.0
Concrete Mixer Truck	81.0
Man Lift	78.0
Compactor (ground)	73.0
Concrete Mixer Truck	81.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
86.9

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, J

[2] Based on the following from the Federal Transit Noise and Vibrat

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Parking Lot Noise Prediction Model

Loomis Costco Enironmental Impact Report

Ref SEL: 71 **Metric: Leq**

Description	# of Stalls	Trip Multiplier	Trips /Period	Lp @ 50'	Distance to Rec.	Shielding Offset	Lp at Rec.
LT-1	80	1	80	54.4	65		52
ST-03	100	1	100	55.4	75		52
ST-04	100	1	100	55.4	75		52

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing AM Peak
Ground Type : Hard
K Factor : NA
Metric (L_{eq}, L_{dn}, CNEL) : Leq
Traffic Desc. (Peak or ADT) : Peak

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
6N	Sierra College Boulevard	King Road	Taylor Road	1094	50	100	93	2	5	75	0	25	
6S	Sierra College Boulevard	Taylor Road	Brace Road	1442	45	100	93	2	5	75	0	25	
7S	Sierra College Boulevard	Brace Road	Granite Drive	1412	40	100	93	2	5	75	0	25	
8S	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	1815	40	100	93	2	5	75	0	25	
12S	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	1958	50	100	93	2	5	75	0	25	
17N	Granite Drive	Rocklin Road	Sierra College Boulevard	1031	30	100	93	2	5	75	0	25	
2S	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	778	40	100	93	2	5	75	0	25	
6W	Taylor Road	Sierra College Boulevard	Delmar Avenue	751	45	100	93	2	5	75	0	25	
15S	Pacific Street	Delmar Avenue	Rocklin Road	875	45	100	93	2	5	75	0	25	
5W	Brace Road	Barton Road	Sierra College Boulevard	267	35	100	93	2	5	75	0	25	
20E	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	2157	40	100	93	2	5	75	0	25	
14N	Rocklin Road	Interstate 80 Ramps	Granite Drive	1608	40	100	93	2	5	75	0	25	
17W	Rocklin Road	Granite Drive	Pacific Street	1600	35	100	93	2	5	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing AM Peak
Metric (Leq, Ldn, CNEL) : Leq

		Segment		Noise Levels, dB Leq				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
6N	Sierra College Boulevard	King Road	Taylor Road	65.8	56.8	65.0	68.7	74	235	743	2351	7435
6S	Sierra College Boulevard	Taylor Road	Brace Road	65.7	57.3	65.7	69.0	80	253	801	2532	8006
7S	Sierra College Boulevard	Brace Road	Granite Drive	64.1	56.4	65.2	68.0	63	200	633	2001	6327
8S	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	65.2	57.5	66.3	69.1	81	257	813	2572	8133
12S	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	68.3	59.3	67.5	71.2	133	421	1331	4208	13307
17N	Granite Drive	Rocklin Road	Sierra College Bou	59.2	53.1	64.2	65.6	36	115	364	1152	3642
2S	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	61.5	53.8	62.6	65.4	35	110	349	1102	3486
6W	Taylor Road	Sierra College Bou	Delmar Avenue	62.9	54.4	62.9	66.2	42	132	417	1318	4169
15S	Pacific Street	Delmar Avenue	Rocklin Road	63.5	55.1	63.6	66.9	49	154	486	1536	4858
5W	Brace Road	Barton Road	Sierra College Bou	55.2	48.2	57.4	59.8	10	30	95	301	952
20E	Rocklin Road	Sierra College Bou	Interstate 80 Ram	66.0	58.2	67.0	69.9	97	306	967	3057	9666
14N	Rocklin Road	Interstate 80 Ram	Granite Drive	64.7	56.9	65.8	68.6	72	228	721	2279	7206
17W	Rocklin Road	Granite Drive	Pacific Street	63.0	56.0	65.2	67.6	57	180	571	1805	5707

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing + Construction Traffic
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Leq **Traffic Desc. (Peak or ADT) :** Peak

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	1150	50	100	93	2	5	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	1498	45	100	93	2	5	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	1468	40	100	93	2	5	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	1871	40	100	93	2	5	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	2014	50	100	93	2	5	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	1087	30	100	93	2	5	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	834	40	100	93	2	5	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	807	45	100	93	2	5	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	931	45	100	93	2	5	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	323	35	100	93	2	5	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	2213	40	100	93	2	5	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	1664	40	100	93	2	5	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	1656	35	100	93	2	5	75	0	25	

0

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing + Construction Traffic
Metric (Leq, Ldn, CNEL) : Leq

		Segment		Noise Levels, dB Leq				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	66.0	57.0	65.2	68.9	78	247	781	2471	7813
2	Sierra College Boulevard	Taylor Road	Brace Road	65.9	57.4	65.9	69.2	83	263	831	2629	8314
3	Sierra College Boulevard	Brace Road	Granite Drive	64.3	56.6	65.4	68.2	66	208	658	2080	6576
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	65.4	57.6	66.4	69.2	84	265	838	2651	8382
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	68.5	59.4	67.6	71.4	137	433	1368	4327	13684
6	Granite Drive	Rocklin Road	Sierra College Bou	59.4	53.3	64.4	65.8	38	121	384	1214	3839
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	61.8	54.1	62.9	65.7	37	118	374	1181	3735
8	Taylor Road	Sierra College Bou	Delmar Avenue	63.2	54.8	63.2	66.5	45	142	448	1416	4478
9	Pacific Street	Delmar Avenue	Rocklin Road	63.8	55.4	63.8	67.1	52	163	517	1634	5166
10	Brace Road	Barton Road	Sierra College Bou	56.1	49.1	58.2	60.6	12	36	115	364	1151
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	66.1	58.3	67.1	70.0	99	314	991	3135	9915
12	Rocklin Road	Interstate 80 Ram	Granite Drive	64.8	57.1	65.9	68.7	75	236	745	2357	7455
13	Rocklin Road	Granite Drive	Pacific Street	63.2	56.2	65.3	67.7	59	187	591	1868	5906
0												
0												
0												
0												

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing No Project Weekday
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	Sierra College Boulevard	King Road	Taylor Road	10940	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	14420	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	14120	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	18150	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	19580	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	10310	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	7780	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	7510	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	8750	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	2670	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	21570	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	16080	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	16000	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing No Project Weekday
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Sierra College Boulevard	King Road	Taylor Road	67.4	58.2	59.3	68.4	70	220	696	2201	6960
2	Sierra College Boulevard	Taylor Road	Brace Road	67.2	58.6	60.1	68.5	71	223	706	2232	7060
3	Sierra College Boulevard	Brace Road	Granite Drive	65.7	57.7	59.6	67.2	52	164	520	1643	5196
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	66.8	58.8	60.7	68.2	67	211	668	2112	6679
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	69.9	60.7	61.9	71.0	125	394	1246	3939	12457
6	Granite Drive	Rocklin Road	Sierra College Bou	60.7	54.4	58.5	63.4	22	69	217	687	2172
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	63.1	55.2	57.0	64.6	29	91	286	905	2863
8	Taylor Road	Sierra College Bou	Delmar Avenue	64.4	55.8	57.3	65.7	37	116	368	1163	3677
9	Pacific Street	Delmar Avenue	Rocklin Road	65.1	56.5	58.0	66.3	43	135	428	1355	4284
10	Brace Road	Barton Road	Sierra College Bou	56.8	49.6	51.8	58.6	7	23	72	227	718
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	67.5	59.6	61.4	69.0	79	251	794	2510	7938
12	Rocklin Road	Interstate 80 Ram	Granite Drive	66.2	58.3	60.1	67.7	59	187	592	1871	5917
13	Rocklin Road	Granite Drive	Pacific Street	64.6	57.4	59.6	66.3	43	136	431	1361	4305

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing No Project Weekend
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	8300	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	12770	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	13760	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	16420	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	14850	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	11810	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	8170	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	7350	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	8140	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	2650	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	13780	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	14290	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	11910	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing No Project Weekend
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	66.2	57.0	58.1	67.2	53	167	528	1670	5280
2	Sierra College Boulevard	Taylor Road	Brace Road	66.7	58.1	59.6	68.0	63	198	625	1977	6252
3	Sierra College Boulevard	Brace Road	Granite Drive	65.6	57.6	59.4	67.0	51	160	506	1601	5064
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	66.3	58.4	60.2	67.8	60	191	604	1911	6043
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	68.7	59.5	60.7	69.8	94	299	945	2988	9447
6	Granite Drive	Rocklin Road	Sierra College Bou	61.3	55.0	59.1	64.0	25	79	249	787	2488
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	63.3	55.4	57.2	64.8	30	95	301	951	3007
8	Taylor Road	Sierra College Bou	Delmar Avenue	64.3	55.7	57.2	65.6	36	114	360	1138	3598
9	Pacific Street	Delmar Avenue	Rocklin Road	64.8	56.2	57.6	66.0	40	126	399	1260	3985
10	Brace Road	Barton Road	Sierra College Bou	56.7	49.6	51.8	58.5	7	23	71	225	713
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	65.6	57.6	59.5	67.1	51	160	507	1604	5071
12	Rocklin Road	Interstate 80 Ram	Granite Drive	65.7	57.8	59.6	67.2	53	166	526	1663	5259
13	Rocklin Road	Granite Drive	Pacific Street	63.3	56.1	58.3	65.1	32	101	320	1013	3205

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing Plus Project Weekday
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	11040	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	14700	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	14500	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	20030	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	19740	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	10350	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	7900	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	7630	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	8870	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	2710	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	21570	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	16300	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	16040	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing Plus Project Weekday
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	67.4	58.2	59.4	68.5	70	222	702	2221	7024
2	Sierra College Boulevard	Taylor Road	Brace Road	67.3	58.7	60.2	68.6	72	228	720	2276	7197
3	Sierra College Boulevard	Brace Road	Granite Drive	65.8	57.9	59.7	67.3	53	169	534	1687	5336
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	67.2	59.3	61.1	68.7	74	233	737	2331	7371
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	69.9	60.7	61.9	71.0	126	397	1256	3971	12558
6	Granite Drive	Rocklin Road	Sierra College Bou	60.7	54.4	58.6	63.4	22	69	218	689	2180
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	63.2	55.2	57.0	64.6	29	92	291	919	2907
8	Taylor Road	Sierra College Bou	Delmar Avenue	64.5	55.9	57.4	65.7	37	118	374	1181	3735
9	Pacific Street	Delmar Avenue	Rocklin Road	65.1	56.5	58.0	66.4	43	137	434	1373	4342
10	Brace Road	Barton Road	Sierra College Bou	56.8	49.7	51.9	58.6	7	23	73	231	729
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	67.5	59.6	61.4	69.0	79	251	794	2510	7938
12	Rocklin Road	Interstate 80 Ram	Granite Drive	66.3	58.4	60.2	67.8	60	190	600	1897	5998
13	Rocklin Road	Granite Drive	Pacific Street	64.6	57.4	59.6	66.4	43	136	432	1365	4316

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing Plus Project Weekend
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	9050	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	14810	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	16340	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	24190	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	15990	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	12150	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	9070	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	8150	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	8940	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	2880	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	13780	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	15410	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	12250	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Existing Plus Project Weekend
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	66.5	57.3	58.5	67.6	58	182	576	1821	5757
2	Sierra College Boulevard	Taylor Road	Brace Road	67.4	58.8	60.2	68.6	73	229	725	2293	7250
3	Sierra College Boulevard	Brace Road	Granite Drive	66.3	58.4	60.2	67.8	60	190	601	1901	6013
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	68.0	60.1	61.9	69.5	89	282	890	2815	8902
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	69.0	59.8	61.0	70.1	102	322	1017	3217	10173
6	Granite Drive	Rocklin Road	Sierra College Bou	61.4	55.1	59.3	64.1	26	81	256	809	2559
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	63.8	55.8	57.6	65.2	33	106	334	1055	3338
8	Taylor Road	Sierra College Bou	Delmar Avenue	64.8	56.2	57.6	66.0	40	126	399	1262	3990
9	Pacific Street	Delmar Avenue	Rocklin Road	65.2	56.6	58.0	66.4	44	138	438	1384	4377
10	Brace Road	Barton Road	Sierra College Bou	57.1	49.9	52.1	58.9	8	25	77	245	775
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	65.6	57.6	59.5	67.1	51	160	507	1604	5071
12	Rocklin Road	Interstate 80 Ram	Granite Drive	66.1	58.1	59.9	67.5	57	179	567	1793	5671
13	Rocklin Road	Granite Drive	Pacific Street	63.4	56.2	58.4	65.2	33	104	330	1042	3296

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term No Project Weekday
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	14280	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	18310	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	18570	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	22900	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	27330	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	12390	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	9060	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	8780	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	10590	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	3510	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	26440	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	21210	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	21010	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term No Project Weekday
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	68.5	59.3	60.5	69.6	91	287	908	2873	9085
2	Sierra College Boulevard	Taylor Road	Brace Road	68.3	59.7	61.2	69.5	90	283	896	2835	8964
3	Sierra College Boulevard	Brace Road	Granite Drive	66.9	58.9	60.8	68.3	68	216	683	2161	6834
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	67.8	59.8	61.7	69.3	84	266	843	2665	8427
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	71.3	62.1	63.3	72.4	174	550	1739	5498	17387
6	Granite Drive	Rocklin Road	Sierra College Bou	61.5	55.2	59.3	64.2	26	83	261	825	2610
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	63.8	55.8	57.6	65.2	33	105	333	1054	3334
8	Taylor Road	Sierra College Bou	Delmar Avenue	65.1	56.5	58.0	66.3	43	136	430	1359	4298
9	Pacific Street	Delmar Avenue	Rocklin Road	65.9	57.3	58.8	67.1	52	164	518	1639	5185
10	Brace Road	Barton Road	Sierra College Bou	58.0	50.8	53.0	59.8	9	30	94	299	944
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	68.4	60.5	62.3	69.9	97	308	973	3077	9730
12	Rocklin Road	Interstate 80 Ram	Granite Drive	67.4	59.5	61.3	68.9	78	247	781	2468	7805
13	Rocklin Road	Granite Drive	Pacific Street	65.7	58.6	60.8	67.5	57	179	565	1788	5653

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term No Project Weekend
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	13830	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	23500	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	26340	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	29650	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	27330	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	15090	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	14080	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	8750	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	10420	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	4830	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	21220	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	27450	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	20120	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term No Project Weekend
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	68.4	59.2	60.4	69.4	88	278	880	2782	8798
2	Sierra College Boulevard	Taylor Road	Brace Road	69.4	60.8	62.2	70.6	115	364	1150	3638	11505
3	Sierra College Boulevard	Brace Road	Granite Drive	68.4	60.5	62.3	69.9	97	307	969	3065	9693
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	68.9	61.0	62.8	70.4	109	345	1091	3450	10911
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	71.3	62.1	63.3	72.4	174	550	1739	5498	17387
6	Granite Drive	Rocklin Road	Sierra College Bou	62.4	56.1	60.2	65.0	32	101	318	1005	3179
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	65.7	57.7	59.5	67.1	52	164	518	1639	5181
8	Taylor Road	Sierra College Bou	Delmar Avenue	65.1	56.5	58.0	66.3	43	135	428	1355	4284
9	Pacific Street	Delmar Avenue	Rocklin Road	65.8	57.2	58.7	67.1	51	161	510	1613	5101
10	Brace Road	Barton Road	Sierra College Bou	59.3	52.2	54.4	61.1	13	41	130	411	1300
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	67.4	59.5	61.3	68.9	78	247	781	2469	7809
12	Rocklin Road	Interstate 80 Ram	Granite Drive	68.6	60.6	62.4	70.0	101	319	1010	3194	10102
13	Rocklin Road	Granite Drive	Pacific Street	65.5	58.4	60.6	67.3	54	171	541	1712	5414

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term Plus Project Weekday
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	14380	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	18590	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	18950	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	24780	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	24560	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	12430	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	9180	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	8900	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	10710	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	3590	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	26440	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	21370	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	21050	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term Plus Project Weekday
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	68.5	59.3	60.5	69.6	91	289	915	2893	9148
2	Sierra College Boulevard	Taylor Road	Brace Road	68.3	59.7	61.2	69.6	91	288	910	2878	9101
3	Sierra College Boulevard	Brace Road	Granite Drive	67.0	59.0	60.8	68.4	70	221	697	2205	6974
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	68.1	60.2	62.0	69.6	91	288	912	2884	9119
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	70.9	61.7	62.9	71.9	156	494	1562	4941	15625
6	Granite Drive	Rocklin Road	Sierra College Bou	61.5	55.2	59.4	64.2	26	83	262	828	2618
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	63.8	55.9	57.7	65.3	34	107	338	1068	3378
8	Taylor Road	Sierra College Bou	Delmar Avenue	65.1	56.5	58.0	66.4	44	138	436	1378	4357
9	Pacific Street	Delmar Avenue	Rocklin Road	66.0	57.3	58.8	67.2	52	166	524	1658	5243
10	Brace Road	Barton Road	Sierra College Bou	58.1	50.9	53.1	59.8	10	31	97	305	966
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	68.4	60.5	62.3	69.9	97	308	973	3077	9730
12	Rocklin Road	Interstate 80 Ram	Granite Drive	67.5	59.5	61.4	69.0	79	249	786	2487	7864
13	Rocklin Road	Granite Drive	Pacific Street	65.7	58.6	60.8	67.5	57	179	566	1791	5664

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term Plus Project Weekend
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	14580	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	25540	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	28820	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	37420	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	28470	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	15430	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	14980	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	9550	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	11220	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	5060	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	21220	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	27730	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	20460	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Short Term Plus Project Weekend
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	68.6	59.4	60.6	69.7	93	293	928	2933	9276
2	Sierra College Boulevard	Taylor Road	Brace Road	69.7	61.1	62.6	71.0	125	395	1250	3954	12504
3	Sierra College Boulevard	Brace Road	Granite Drive	68.8	60.8	62.7	70.3	106	335	1061	3354	10606
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	69.9	62.0	63.8	71.4	138	435	1377	4355	13770
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	71.5	62.3	63.5	72.6	181	573	1811	5728	18112
6	Granite Drive	Rocklin Road	Sierra College Bou	62.5	56.2	60.3	65.1	33	103	325	1028	3250
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	65.9	58.0	59.8	67.4	55	174	551	1743	5513
8	Taylor Road	Sierra College Bou	Delmar Avenue	65.5	56.8	58.3	66.7	47	148	468	1478	4675
9	Pacific Street	Delmar Avenue	Rocklin Road	66.2	57.5	59.0	67.4	55	174	549	1737	5493
10	Brace Road	Barton Road	Sierra College Bou	59.6	52.4	54.6	61.3	14	43	136	431	1362
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	67.4	59.5	61.3	68.9	78	247	781	2469	7809
12	Rocklin Road	Interstate 80 Ram	Granite Drive	68.6	60.7	62.5	70.1	102	323	1020	3227	10205
13	Rocklin Road	Granite Drive	Pacific Street	65.6	58.5	60.6	67.4	55	174	551	1741	5505

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term No Project Weekday
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	26500	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	31550	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	29900	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	34750	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	37200	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	12500	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	13720	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	10850	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	15300	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	5800	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	29250	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	31550	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	23900	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term No Project Weekday
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	71.2	62.0	63.2	72.3	169	533	1686	5331	16859
2	Sierra College Boulevard	Taylor Road	Brace Road	70.6	62.0	63.5	71.9	154	488	1545	4884	15446
3	Sierra College Boulevard	Brace Road	Granite Drive	68.9	61.0	62.8	70.4	110	348	1100	3479	11003
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	69.6	61.7	63.5	71.1	128	404	1279	4044	12788
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	72.7	63.5	64.7	73.7	237	748	2367	7484	23666
6	Granite Drive	Rocklin Road	Sierra College Bou	61.6	55.3	59.4	64.2	26	83	263	833	2633
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	65.6	57.6	59.4	67.0	50	160	505	1597	5049
8	Taylor Road	Sierra College Bou	Delmar Avenue	66.0	57.4	58.9	67.3	53	168	531	1680	5312
9	Pacific Street	Delmar Avenue	Rocklin Road	67.5	58.9	60.4	68.7	75	237	749	2369	7490
10	Brace Road	Barton Road	Sierra College Bou	60.1	53.0	55.2	61.9	16	49	156	494	1561
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	68.8	60.9	62.7	70.3	108	340	1076	3404	10764
12	Rocklin Road	Interstate 80 Ram	Granite Drive	69.2	61.2	63.1	70.6	116	367	1161	3671	11610
13	Rocklin Road	Granite Drive	Pacific Street	66.3	59.1	61.3	68.1	64	203	643	2034	6431

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term No Project Weekdend
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	16950	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	26850	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	29700	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	30100	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	30300	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	12150	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	12750	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	9050	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	14750	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	7600	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	20000	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	30600	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	12250	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term No Project Weekdend
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	69.3	60.1	61.2	70.3	108	341	1078	3410	10783
2	Sierra College Boulevard	Taylor Road	Brace Road	69.9	61.3	62.8	71.2	131	416	1314	4157	13145
3	Sierra College Boulevard	Brace Road	Granite Drive	68.9	61.0	62.8	70.4	109	346	1093	3456	10930
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	69.0	61.0	62.8	70.4	111	350	1108	3503	11077
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	71.8	62.6	63.8	72.9	193	610	1928	6096	19276
6	Granite Drive	Rocklin Road	Sierra College Bou	61.4	55.1	59.3	64.1	26	81	256	809	2559
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	65.2	57.3	59.1	66.7	47	148	469	1484	4692
8	Taylor Road	Sierra College Bou	Delmar Avenue	65.2	56.6	58.1	66.5	44	140	443	1401	4431
9	Pacific Street	Delmar Avenue	Rocklin Road	67.3	58.7	60.2	68.6	72	228	722	2284	7221
10	Brace Road	Barton Road	Sierra College Bou	61.3	54.2	56.3	63.1	20	65	204	647	2045
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	67.2	59.3	61.1	68.7	74	233	736	2327	7360
12	Rocklin Road	Interstate 80 Ram	Granite Drive	69.0	61.1	62.9	70.5	113	356	1126	3561	11261
13	Rocklin Road	Granite Drive	Pacific Street	63.4	56.2	58.4	65.2	33	104	330	1042	3296

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term Plus Project Weekday
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	26600	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	31830	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	30280	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	36630	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	37360	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	12540	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	13340	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	10970	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	15420	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	5840	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	29250	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	31710	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	23640	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term Plus Project Weekday
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	71.2	62.0	63.2	72.3	169	535	1692	5351	16923
2	Sierra College Boulevard	Taylor Road	Brace Road	70.7	62.1	63.6	71.9	156	493	1558	4928	15583
3	Sierra College Boulevard	Brace Road	Granite Drive	69.0	61.1	62.9	70.5	111	352	1114	3524	11143
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	69.8	61.9	63.7	71.3	135	426	1348	4263	13480
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	72.7	63.5	64.7	73.8	238	752	2377	7516	23768
6	Granite Drive	Rocklin Road	Sierra College Bou	61.6	55.3	59.4	64.2	26	84	264	835	2641
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	65.4	57.5	59.3	66.9	49	155	491	1552	4909
8	Taylor Road	Sierra College Bou	Delmar Avenue	66.1	57.4	58.9	67.3	54	170	537	1698	5371
9	Pacific Street	Delmar Avenue	Rocklin Road	67.5	58.9	60.4	68.8	75	239	755	2387	7549
10	Brace Road	Barton Road	Sierra College Bou	60.2	53.0	55.2	62.0	16	50	157	497	1571
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	68.8	60.9	62.7	70.3	108	340	1076	3404	10764
12	Rocklin Road	Interstate 80 Ram	Granite Drive	69.2	61.3	63.1	70.7	117	369	1167	3690	11669
13	Rocklin Road	Granite Drive	Pacific Street	66.2	59.1	61.3	68.0	64	201	636	2012	6361

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term Plus Project Weekdend
Ground Type : Hard **K Factor :** NA
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	6N	King Road	Taylor Road	17700	50	100	97	2	1	75	0	25	
2	Sierra College Boulevard	Taylor Road	Brace Road	28890	45	100	97	2	1	75	0	25	
3	Sierra College Boulevard	Brace Road	Granite Drive	32180	40	100	97	2	1	75	0	25	
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ramps	37870	40	100	97	2	1	75	0	25	
5	Sierra College Boulevard	Interstate 80 Ramps	Rocklin Road	31440	50	100	97	2	1	75	0	25	
6	Granite Drive	Rocklin Road	Sierra College Boulevard	15640	30	100	97	2	1	75	0	25	
7	Taylor Road	Horseshoe Bar Road	Sierra College Boulevard	13650	40	100	97	2	1	75	0	25	
8	Taylor Road	Sierra College Boulevard	Delmar Avenue	9850	45	100	97	2	1	75	0	25	
9	Pacific Street	Delmar Avenue	Rocklin Road	15550	45	100	97	2	1	75	0	25	
10	Brace Road	Barton Road	Sierra College Boulevard	7830	35	100	97	2	1	75	0	25	
11	Rocklin Road	Sierra College Boulevard	Interstate 80 Ramps	20000	40	100	97	2	1	75	0	25	
12	Rocklin Road	Interstate 80 Ramps	Granite Drive	31750	40	100	97	2	1	75	0	25	
13	Rocklin Road	Granite Drive	Pacific Street	18140	35	100	97	2	1	75	0	25	

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : 60550073 - Loomis Costco EIR
Project Number : 60550073
Modeling Condition : Cumulative Long Term Plus Project Weekdend
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	6N	King Road	Taylor Road	69.5	60.2	61.4	70.5	113	356	1126	3561	11261
2	Sierra College Boulevard	Taylor Road	Brace Road	70.3	61.7	63.1	71.5	141	447	1414	4473	14144
3	Sierra College Boulevard	Brace Road	Granite Drive	69.3	61.3	63.1	70.7	118	374	1184	3745	11842
4	Sierra College Boulevard	Granite Drive	Interstate 80 Ram	70.0	62.0	63.8	71.4	139	441	1394	4407	13936
5	Sierra College Boulevard	Interstate 80 Ram	Rocklin Road	71.9	62.7	63.9	73.0	200	633	2000	6325	20002
6	Granite Drive	Rocklin Road	Sierra College Bou	62.5	56.2	60.4	65.2	33	104	329	1042	3294
7	Taylor Road	Horseshoe Bar Rc	Sierra College Bou	65.5	57.6	59.4	67.0	50	159	502	1588	5023
8	Taylor Road	Sierra College Bou	Delmar Avenue	65.6	57.0	58.5	66.8	48	152	482	1525	4822
9	Pacific Street	Delmar Avenue	Rocklin Road	67.6	59.0	60.5	68.8	76	241	761	2407	7613
10	Brace Road	Barton Road	Sierra College Bou	61.4	54.3	56.5	63.2	21	67	211	666	2107
11	Rocklin Road	Sierra College Bou	Interstate 80 Ram	67.2	59.3	61.1	68.7	74	233	736	2327	7360
12	Rocklin Road	Interstate 80 Ram	Granite Drive	69.2	61.3	63.1	70.7	117	369	1168	3695	11684
13	Rocklin Road	Granite Drive	Pacific Street	65.1	57.9	60.1	66.9	49	154	488	1544	4881